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U. S. Department of Agriculture

Glad Guide

1932

**Describing a Few Glad Beauties,
With Comments**

Grown by
The Foss Heaton Glad Gardens
Creston, Iowa

VARIETY DESCRIPTIONS

The following descriptions of varieties are arranged by color classes. For alphabetical arrangement see price list.

Colors are described in two ways, the one in everyday language, and the other according to the Ridgway color charts, which are a series of eleven hundred different named color plates contained in a book called "Color Standards and Nomenclature," by Robert Ridgway, Washington, D. C.

The blooming dates are of necessity only approximations. They vary greatly according to the climate, the weather, the soil, the size of the bulb, and so forth. They are of value chiefly in comparing varieties with one another.

The members of the American Gladiolus Society vote each year on the world's best varieties. The method is for each member to send to the secretary a list of ten favorites for the year. The votes are added up for all varieties named, and then ranked in the order of the number of votes each receives. The number in parentheses in the following descriptions is the ranking of the variety for the summer of 1930. The 1931 rankings will be published next summer. Only the first fifty are given.

WHITE

ALBATROS

(Pfitzer) Mid-season, 75 days. (17th).

Undoubtedly the best white for two reasons: the spike is extremely tall and stretchy, and the white never tints pink as so many whites do. The flower is very large, round, wide-open, well placed, and of the purest snow white color.

CARMEN SYLVA

(Decorah) Mid-season, 80 days. (38th in 1929).

Among the best of the cheaper whites. It has stretch and gracefulness, in which other whites are noticeably lacking. I have found too many white Cannas that should be white Glads. A well grown Carmen Sylva is gorgeous.

HENRY C. GOEHL

(Fischer) Mid-season, 85 days. Ridgway: White, slightly shaded Rose Pink; blotch Pomegranate Purple.

An attractive two-color Glad. The ground color is a solid white, overlaid usually by a light rose pink, which is not a stain. The big red blotch has a well-defined edge, just like a dab of red paint. Tall stretchy spike, with flowers gracefully arranged.

MAMMOTH WHITE

(United Bulb Co.) Mid-season, 80 days. (35th).

A gorgeous white of great size and many out at one time. A pure glistening satiny white with creamy buds. Broad rounded petals, nicely placed blooms, fine spike. One of the best.

MARIE KUNDERD

(Kunderd) Early, 60 days. (28th in 1929).

A very popular ruffled snow white. Petals are of the needle-point type. Very early large white of fine growing habits.

MRS. F. C. HORNBERGER

(Hornberger) Late, 90 days. (23rd).

A strong growing white of purest color. Exceptionally fine for blooming out after it is cut, the strong thick stems supplying plenty of nourishment to grow out the entire flower head. Not always so stretchy as it might be.

CREAM

TWILIGHT

(Kunderd) Late, 90 days. Ridgway: Seashell Pink; small feather Spinel Red, tipped with Pinard Yellow.

A nice creamy pink that is nearly pure cream in dry hot weather. Heavily ruffled, on a heavy spike, with heavy foliage.

YELLOW

GOLD EAGLE

(Austin) Early, 65 days. Ridgway: light Empire Yellow.
The earliest pure deep yellow.

GOLDEN DREAM

(Groff) Late, 90 days. Ridgway: Empire yellow. (8th).

The world's best yellow and among the world's best ten according to the 1930 vote. Exceedingly strong grower, tall heavy spike, with many out at one time. Remarkable for its beautiful form, the petals curling back like a rose. The color is a deep pure yellow self color.

GOLDEN FRILLS

(Kunderd) Early, 65 days. Ridgway: Empire Yellow; feather Old Rose. (38th).

Third best Prim in the world by the 1930 vote. Heavily ruffled, deep yellow with small pink feather. One of the brightest yellows in Glads.

K'S YELLOW WONDER

(Kunderd) Early, 65 days. Ridgway: Pinard Yellow.

One of the tall Glads. A clear, attractive light yellow of good size.

P'S YELLOW WONDER

(Pfitzer) Mid-season, 85 days. Ridgway: Pinard Yellow.

The largest of the light yellows, though the spike is not so tall as other yellows. The color is clear and clean.

RUFFLED GOLD

(Goodrich) Mid-season, 80 days. Ridgway: Straw Yellow, small feather Corinthian Pink.

A yellow that is different. Remarkable for its perfect form, one of the most beautiful in Glads. A beautifully clear soft light yellow. Fine placement, extremely tall heavy growth, and prolific. By far the best light yellow.

SOUVENIR

(Jonkheer) Early, 60 days. Ridgway: Empire Yellow. (34th in 1929).

The best yellow Prim. Used extensively for greenhouse forcing. Tall graceful stem and deep clear color. Opens fine when cut.

LIGHT PINK

BREAK O'DAY

(Glad Bill) Early, 60 days. Ridgway: Light Geranium Pink, Barium Yellow throat. (37th in 1929).

Light pink, becoming deeper towards edges and tips of the petals, and blending with the creamy throat. Vigorous growth, spikes slender and graceful.

CORYPHEE

(Pfitzer) Mid-season, 80 days. Ridgway: true La France Pink. (19th).

The most beautiful pink in Glads, spoiled by a stem that crooks in a hot dry climate. You folks where it is cool have a masterpiece in this one. The clearest purest color of all. Big flower, several open.

GIANT NYMPH

(Coleman) Mid-season, 85 days. Ridgway: Shrimp Pink, throat Napthalene Yellow. (11th).

A vigorous light pink that never crooks. Heavy green foliage, very strong spike, and prolific. Big flowers on a big stem, and well placed. Has kept this ranking, or better, for the last three years.

MRS. FRANK PENDLETON

(Kunderd) Mid-season, 85 days. Ridgway: Hermosa Pink, blotch Ox-blood Red (36th).

I still think Pendleton is one of the best. It has been on the market almost a quarter of a century, and may be a good bet for another one. So many Glads deteriorate in the course of time, but not this one. It has the same fine spike, with about three out, and fine buds, and same fine color, as ever. A clear light rosy pink, with a big blood-red blotch.

MRS. H. E. BOTHIN

(Diener) Late, 95 days. Ridgway: Shrimp Pink to lighter, blotch Scarlet.

Exceedingly tall heavy thick spike. The color is a light pure pink with a large vivid scarlet blotch. Only two or three out, but heavily ruffled and of good size. Blooms out fine when cut, the tips being beautiful.

MRS. P. W. SISSON

(Coleman) Mid-season, 85 days. Ridgway: Shrimp Pink to deeper. (12th).

An improvement on Giant Nymph, though closely resembling it in many ways. Same spike, same shaped flower, and the same plant, but the color is very much more clear and pure. Will supersede Giant Nymph in time. A beautifully refined light pink, with a high rating.

RITA BECK

(Fischer) Late, 90 days. Ridgway: Shrimp Pink. (37th).

A very large light pink. Not all the spikes come tall, and the color fades when cut. Eliminate these two faults and we would have a masterpiece.

DARK PINK**CATHERINE COLEMAN**

(Coleman) Late, 90 days. Ridgway: Geranium Pink, small feather Pomegranate Purple. (15th).

This Glad has stood the test of time to a remarkable degree, being regarded as among the very best for years. Gaining steadily in the Popularity Vote. Extremely tall stretchy graceful spike, about the tallest among Glads. Perfect placement on a wiry stem. Color is a rich pleasing geranium pink. Dependable in every way.

EVELYN KIRTLAND

(Austin) Mid-season, 85 days. Ridgway: Geranium Pink to lighter, blotch Scarlet. (17th in 1929).

An old favorite, but still useful. A mellow glistening geranium pink.

LOS ANGELES

(Houdyshell) Mid-season, 80 days. Ridgway: deep Shrimp Pink, feather Scarlet Red. (50th).

The Glad that sends up several spikes from large bulbs. Evidently has Prim blood. The color is a mellow, glistening shrimp pink. Fine forcer.

MARSHALL FOCH

(Kunderd) Late, 90 days. Ridgway: deep Shrimp Pink, Scarlet Red feather markings in throat. (43rd in 1929).

A very large round wide-open flat flower of a deep glistening pink. Not so stretchy as it should be, but very popular, and hard to beat when well grown.

MAURICE FULD

(Gage) Late, 90 days. Ridgway: Rose Doree, white throat blotch with Carmine markings.

An unusually large deep pink. The white throat blotch contains a red diamond. Several out on a good spike. A clear, clean Glad.

MRS. LEON DOUGLAS

(Diener) Mid-season, 80 days. Ridgway: Rose Doree to Geranium Pink towards throat. (4th).

Here is one that never fails to get tall and stretchy in any climate. A real live refreshing pink. Fine growing habits. Especially fine under artificial light. A great exhibition and garden variety. Has always ranked near the top.

MR. W. H. PHIPPS

(Diener) Late, 95 days. Ridgway: light Geranium Pink. (1st).

This Glad always leads them all. The world's best according to every symposium. No Glad more gorgeous than a well grown Phipps. A light geranium pink. Remarkable for the great number in bloom at one time, and for the heavy tall spike. Nothing equals a big basket of Phipps.

RICHARD DIENER

(Diener) Late, 90 days. Ridgway: true Geranium Pink, throat Straw Yellow. (34th).

This Glad is still splendid in some localities. The combination of rich pink and the pure yellow is attractive. Many out on a sturdy spike. Not so tall as it might be.

TYCKO ZANG

(Austin) Late, 90 days. Ridgway: Rose Doree, throat white. (41st in 1929).

One of the biggest florets of all, and the foliage is exceedingly heavy, but if you want a rich clear pink Canna here it is. With plenty of moisture September blooms are very fine, being much taller.

WINGED VICTORY

(Briggs) Mid-season, 85 days. Ridgway: Geranium Pink, flaked scarlet.

A big geranium pink with long petals, the largest Glad I know of. Many out on a straight spike, the later flowers tapering off to medium size at the tip. If you want a giant pink that flakes, here it is. Splendid color.

SALMON PINK**BETTY NUTHALL**

(Salbach) Late, 90 days. Ridgway: Bittersweet Pink; throat Pinard Yellow. (7th).

This Glad has risen rapidly in popular esteem, and for the very good reason that it is the most outstanding introduction in recent years. Extremely fine for cutting. The stiff straight spikes, with many buds, stand far out of the rather heavily bunched foliage. The pure clear golden pink is a color that satisfies every flower lover. Many good sized blooms out at one time on a spike that never crooks.

GLORIANA

(Betscher) Early mid-season, 80 days. Ridgway: Salmon color, throat Pinard Yellow. (13th).

The world's best Prim. The Glad with the golden heart. A lovely Prim. Color is genuine salmon, but the thing that makes this Prim beautiful is the wonderful blending of this salmon color with the pure golden throat. The buds are as pretty as roses. Many out on a very tall stem.

SHEILA

(Coleman) Early, 70 days. Ridgway: Strawberry Pink, throat Baryta Yellow.

A tall graceful spike with three or four large flowers out at one time. Color is salmon pink, with creamy throat and slight pencilings.

ORANGE**HARBINGER**

(Sanford) Late, 90 days. Ridgway: Grenadine Red.

Really a large-flowered wide-open Alice Tiplady. Same color, but not a Prim. Very vigorous and prolific.

LA PALOMA

(Dusinberre) Early, 75 days. Ridgway: Capucine Yellow to Mikado Orange, back of petals often shaded Flame Scarlet. (42nd).

A very near approach to true orange. It is a Prim, with many well-opened large flowers out at one time on a tall spike.

ORANGE WONDER

(Kemp) Late, 95 days. Ridgway: deep Grenadine, almost Grenadine Red.

By far the best orange. One of the finest Glads under artificial light I have ever seen. In one other respect it is the equal of the best I know of, and that is its great ability to bloom out when cut. Somewhat short spike, but the growth of plant is extremely heavy and vigorous. No suggestion of Prim blood. A very pleasing deep orange.

SCARLET**AFLAME**

(Hornberger) Early, 75 days. Ridgway: Rose Doree, shaded on back of petals Scarlet. (18th).

Very large for a Prim. Does not particularly like a hot and dry climate. More vigorous than most Prim. Color is a flaming deep pink or light scarlet. Is rated very high.

DR. F. E. BENNETT

(Diener) Early, 75 days. Ridgway: Scarlet. (6th).

About as near perfect as any Glad I know of. All other Glads have their faults that bother me. Not so with Bennett. This Glad and one or two others, like Betty

Nuthall and Phipps, seem to be specially designed for cutting, with their bunched foliage, tall straight regular stems, and many fine buds showing color. A vivid scarlet. Has always ranked near the top.

PFITZER'S TRIUMPH

(Pfitzer) Mid-season 85 days. Ridgway: Scarlet, blotch deeper. (3rd).

Sensational when grown right. Requires a cool climate and plenty of moisture to be at its best. Do not leave out doors, or the hot sun will burn it up. Big round wide-open blooms of a solid scarlet color. The third best in the world.

PRIDE OF PORTLAND

(Ellis) Mid-season, 85 days. Ridgway: light Scarlet Red, blotch white.

A vivid clear scarlet pink with a large white blotch. The pink is so deep, at times being almost true scarlet-red, that it is placed in the scarlet class. Immense wide-open flowers on a very tall spike. It stood the heat racket as well as any Glad this past two seasons. Splendid acquisition in every way. Fine form and arrangement, several out, pure color.

RED

CRIMSON GLOW

(Betscher) Mid-season, 80 days. Ridgway: Nopal Red. (19th in 1929).

A fine crimson, and very popular. The flower is wide open and of great size and dependable in every way.

RED GLORY

(Ellis, Piper) Mid-season, 75 days. Ridgway: Carmine.

A sport of Purple Glory, having everything the same except the color, which is a vivid deep carmine of great purity. The same ruffled blooms, same peculiar buds, the same dark shadings, same vigorous plant and heavy foliage. But the bulblets sprout better. A very fine Glad indeed.

SCARLET WONDER

(Cowee) Mid-season, 85 days. Ridgway: Scarlet Red.

The giant among the reds. Has no superior when well grown, but ordinarily the spike is rather bunchy, with only two or three out at one time. Immense dazzling florets at all times, of a rich scarlet red.

DARK RED

ARABIA

(Hinkle) Early, 70 days. Ridgway: Bordeaux, shaded and flaked black.

A very dark red with black buds. A glossy velvety flower of fair size. The most valuable dark red in commerce because the spikes never crook, and the flower is regular in form and very dependable in every way. The only dark red of which this can be said that I know of. Very easily grown, and stands heat and drouth as well as any Glad.

JOHN T. PIRIE

(Kunderd) Mid-season, 85 days. Ridgway: Neutral Red, lighter towards throat; blotch Carmine, bordered Barium Yellow.

The demand for this Glad is increasing fast. A very satisfactory flower in every way, if you like the smoky colors. The diamond-shaped red blotch, outlined by a rich creamy band, lights up the flower in a striking manner. A Glad that never varies in all kinds of weather, and is fine as a cut flower. Extremely tall. Odd color, described by the originator as a mahogany brown.

MAROCCO

(Pfitzer) Mid-season, 80 days. Ridgway: deep Burnt Lake, flaked black.

A black one from Europe. Even darker than Arabia. The spikes are exceedingly tall and slender, with many dark red flowers, that are wide-open and of good size. Heat and drouth do not bother it, though it crooks some.

MOORISH KING

(Pfitzer) Late, 95 days. Ridgway: very deep Ox-blood Red, or Victoria Lake.

One of the blackest of all Glads. It is a scarlet black rather than a purple black. A self color. Many out on a very tall stretchy spike that never crooks. Petals rather long and narrow and pointed. The flower is very large, not always perfectly placed, but is certainly a rich gorgeous thing.

PURPLE GLORY

(Kunderd) Mid-season, 75 days. Ridgway: Amaranth Purple. (9th).

Rightly regarded as the very best dark red Glad in existence. Although commonly considered as a dark red, the color is really a purplish red. Ranked for years among the world's best ten Glads. Wonderfully ruffled, heavy healthy foliage, and vigorous plant. The thick leathery petals and glossy texture are unsurpassed.

THOS. A. EDISON

(Kunderd) Mid-season, 85 days. Ridgway: Garnet Brown. (39th).

A beautifully ruffled medium sized Glad. The flowers are wide-open and well placed on a slender stem. But the color is unusual, being a real garnet. Very distinctive.

ROSE**CRINKLES**

(Kunderd) Mid-season, 80 days. Ridgway: Tyrian Rose to lighter towards throat.

A distinctive Glad. Not large, but the many extremely ruffled flowers suggest beautiful carnations along the sturdy stem. An extremely vivid deep rose color. Exceedingly well liked. No other like it.

DR. NELSON SHOOK

(Kunderd) Late, 90 days. Ridgway: deep Rose Red to Pomegranate Purple towards outer edges and the small feather blotch. (26th).

One of Mr. Kunderd's best. The spike is extremely heavy, always straight, with many fair-sized deep vivid rose-red ruffled blooms. In great demand as the best of this color.

EMILE AUBRUN

(Lemoine) Late, 90 days. Ridgway: Begonia Rose, buds Spectrum Red, blotch Pomegranate Purple. (16th).

An unusual Glad. Large flowers perfectly placed, with broad flaring petals, and many out at one time on a very tall sturdy spike. Color is a deep begonia rose, or rosy red, with almost a bronzy sheen at times. A very strong grower and very popular.

PRIDE OF WANAKAH

(Criswell) Mid-season, 85 days. Ridgway: Tyrian Rose, blotch Pomegranate Purple. (47th).

An extremely tall one in the deep rose class. A bright, smooth, mellow color. The growth is vigorous, extremely prolific, spikes slender and graceful, and as tall as anything in Glads.

ROSE ASH

(Diener) Late, 90 days. Ridgway: Rocellin Purple, blotch Straw Yellow. (45th).

Often mellows into a sort of mouse color, especially towards the edges of the petals. A rather subdued color. Extremely tall sturdy spike, with the florets arranged around the spike. Always in demand. A smoky, or ashes of rose, color.

ROSE PINK**E. J. SHAYLOR**

(Kunderd) Early, 70 days. Ridgway: light Rose Red, lighter towards throat, feather deeper. (33rd in 1929).

Has been grown in large quantity everywhere, and is in heavy demand. A pleasing brilliant rose pink, nicely ruffled, nice spike, fine growing habits, and early.

HIGHLAND LADDIE

(Kunderd) Mid-season, 80 days. Ridgway: light Tyrian Rose to lighter throat.

This Glad is not appreciated as it should be. It has splendid growing habits, and is very satisfactory in every way. A vivid Glad, and well named, being a deep shading of rose pink on a light background. Of sturdy, vigorous growth.

KEN

(Goodrich) Late, 90 days. Ridgway: deep Rose Pink, deepening to true Rose Color towards tips and edges of petals.

For purity of color there are few Glads as good as this one. About the truest rose pink in Glads, which becomes deeper towards the outer part of the flower, where it is a true rose color. A slight rose feather blotch. Extremely tall slender plant and spike,

with a fine flower head containing many buds, with an unusually large number out at one time. Splendid for cutting. Splendid keeper. Perfect arrangement, and a very large flower.

SALBACH'S ORCHID

(Salbach) Mid-season, 80 days. Ridgway: Rose Pink.

A clear true rose pink, very nearly self color. Slightly ruffled, many out at one time, perfect placement on a stem that never crooks. Not quite so large as Minuet, but closely resembles it in many respects, except color and number out. Rose pinks of such purity are rare in Glads. A very fine thing.

SWEET ROSE

(Kunderd) Early, 75 days. Ridgway: Eosine Pink, blotch Pomegranate Purple.

A wonderful begonia pink, with a beautiful blotch. A splendid placement of big round flowers on a fine spike. The flower has a smooth, round, wide-open appearance. Fine in every way, and very beautiful.

LAVENDER

BERTY SNOW

(Mair) Mid-season, 80 days. Ridgway: Pale Rosolane Purple, blotch and mid-ribs lighter. (24th).

A beautiful addition to the lavender class. It came perfectly clear this past season. Flakes in some localities, and in some seasons here. When it is clear there is none finer. A vivid, intense, rosy lavender, relieved by a lighter throat and mid-ribs. Many out at one time on a fine spike. Florets of fine form and nicely arranged.

CAPT. BOYNTON

(Boynton) Mid-season, 80 days. Ridgway: Mallow Pink to light Mallow Purple towards edges and tips of the petals, feather blotch Aster Purple. (43rd).

This Glad is increasing in popularity. The spike is very tall, always straight. The lavender is on a white ground, becoming deeper towards the edges, like dripping a pinkish stain. A fine large well-opened flower.

DR. MOODY

(Mrs. Kinyon). Mid-season, 85 days. Ridgway: Phlox Pink. (25th).

A lovely bluish lavender pink, with many out and many buds showing color. The flower head is not as stretchy as it might be. We should have this color on a Minuet spike. Vigorous plant and easily grown.

JANE ADDAMS

(Decorah) Mid-season, 85 days. Ridgway: Rosolane Pink to deeper, buds deeper, blotch Naphthalene Yellow. (21st).

As this variety becomes older, the flaking seems to become less noticeable. Shares popularity with Phipps as the best with visitors to our fields. The remarkable thing about this Glad with us is its extremely great keeping and lasting qualities as a cut flower. Nothing equal to it in this respect, and it breeds this quality into its seedlings. It is not a pale subdued lavender, but a living vivid thing. Only a few out, but these are extremely large and wide open. Becoming very popular, one of the coming Glads.

JUBILEE

(Kemp) Late, 90 days. Ridgway: deep Cameo Pink, almost Thulite Pink.

A giant lavender pink with long wavy petals. The color is a subdued bluish toned lavender pink, flaked deeper. Several open on a very tall slender stem.

MINUET

(Coleman) Late, 90 days. Ridgway: Mallow Pink. (2nd).

The world's second best Glad by the recent vote, ranking only five votes behind Mr. W. H. Phipps. It seems that the mallow pink color just about suits everybody's taste. The other lavender Glad in this section, Capt. Boynton, has the same beautiful pink as Minuet, and Capt. Boynton is becoming popular among the florists. There will be a tremendous demand for Minuet for many years to come. Fine spike, perfect form and arrangement, pleasing color.

MRS. F. C. PETERS

(Fischer) Late, 90 days. Ridgway: Pale Rosolane Purple, blotch Amaranth Purple. (14th).

The high ranking blotched lavender. Has been splendid for years. Very tall spikes, beautifully formed florets, of a lovely rose-lilac color, with a wonderful dark blotch on a lower lip petal that usually appears but once on each flower. Fine in every way.

ROYAL LAVENDER

(Schleider) Late, 90 days. Ridgway: Mallow Purple to lighter throat.

A strong growing deep lavender pink, or vivid phlox color. A color not commonly seen in Glads.

PURPLE**CHAS. DICKENS**

(Pfitzer) Late, 90 days. Ridgway: Aster Purple, blotch Amaranth Purple. (33rd).

A deeper, more subdued shade, than Anna Eberius or Henry Ford, though practically the same color. But it is far taller than the former, and has more out at one time. A vivid reddish purple of fine size on a fine slender stem that never crooks. This one and Paul Pfitzer are the world's best purples at present.

DUCHESS OF YORK

(Velthuys) Mid-season, 80 days. Ridgway: Pansy Purple, blotch Cotinga Purple.

Not large, but the spike is tall and graceful. However, it is the color that makes this Glad useful. A blue-purple that is unique, especially the blotch.

HENRY FORD

(Diener) Late, 90 days. Ridgway: Rhodamine Purple.

Still the most vivid red-purple. Many out at one time. It has two faults: the florets are on opposite sides of the spike, and it is not so stretchy as it might be. Some folks like them this way. Let us have a Betty Nuthall or a Bennett this color.

PAUL PFITZER

(Pfitzer) Early, 70 days. Ridgway: a bright Amaranth Purple. (28th).

A bright red-purple self color. The world's best purple according to the 1930 vote. It is early, exceedingly tall stem, fine healthy foliage, fine in every way. The color is clear and clean and dazzling. The flowers are of fine form, gracefully arranged on a stretchy spike. Not in the least affected by heat and drouth, and does not fade nor burn. Decidedly one of the very best.

PURPLE QUEEN

(Kunderd) Early, 75 days. Ridgway: Aster Purple.

Color like Paul Pfitzer except a more subdued or bluer tone, same as the purple aster. There are more out and more compactly arranged, and slightly ruffled. Blooms out fine when cut.

BLUE**GERALDINE FARRAR**

(Diener) Mid-season, 80 days. Ridgway: deep Lavender, feather Livid Purple. (48th in 1929).

Until lately this variety has been rather temperamental, but the last two or three years with us it has been beautiful and fine in every way, the spikes very tall and many large wide-open flowers out at one time, of the genuine lavender color of commerce. No other Glad of just this color. In florescence it is ahead of Veilchenblau here with us. One of Mr. Diener's greatest contributions. Use no fertilizers on this Glad.

GERTRUDE PFITZER

(Pfitzer) Mid-season, 80 days. Ridgway: Pale Lobelia Violet, feather blotch Hortense Violet, with center Rood's Violet.

Here is a splendid light blue. It is far ahead among the newer light blues, because of the fact that it never fades in the slightest degree and is of very sturdy growth. The healthy heavy foliage and extremely tall sturdy spike places it in the lead. Prolific and easy growing. The color is a light blue, almost true lavender, with a subdued bluish feather. Perfectly placed flowers on a graceful stem.

HEAVENLY BLUE

(Pfitzer) Mid-season, 85 days. Ridgway: Pale Lavender-Violet, small feather Aster Purple. (31st).

This light blue is different from other blues, being clear and more delicate in color. A well named Glad. Large florets, many out on a stiff stem, fine form. The serious fault is that it fades when cut. The best blue for outdoors and cool weather.

MARMORA

(Errey) Mid-season, 80 days. Ridgway: Light Vinaceous Lilac, blotch Deep Purplish Vinaceous in the throat to Rocellin Purple on the tip. (5th).

The finest in the smoky class, and one of the best ten Glads in the world according to the latest vote. It rose from 22nd place two years ago to 8th place last year and to 5th place this year. Sure to be good for many years. Simply gorgeous in the show room, nearly the whole of a long heavy spike being in bloom at one time. The best way to describe the color is to call it a grayish lavender with a petunia blotch. A sure winner everywhere. Of great size and vigor, prolific and easy growing. A sport of Emile Aubrun, and it comes from Australia.

MRS. VAN KONYNENBURG

(Pfitzer) Mid-season, 85 days. Ridgway: Deep Lavender, feather blotch Rosolane Purple. (32nd).

Probably as near blue as any. The spike is tall and slender, but the florets are not always perfectly arranged, though they are large and wide-open. Easily grown.

VEILCHENBLAU

(Pfitzer) Mid-season, 80 days. Ridgway: Deep Hyssop Violet, small blotch deep Amaranth Purple. (10th).

In the charmed inner circle of the world's ten best Glads, and deservedly so. The finest growth of spike and plant of all the blues, and equal to any of the finer varieties of other colors. The rich dark blue buds, and fine Iris-blue open flower, are beautiful. Rather hard to germinate the bulblets. Usually will not bloom from small bulbs.

1932 Price List

These prices cancel all others mailed to you. All prices in this catalog, except where noted, PREPAID anywhere. DISCOUNTS: \$5.00 to \$15.00, 5 percent in cash or extra bulbs of your choice; over \$15.00, 10 per cent.

Cash, please; or, 25 percent cash, and balance before delivery or C. O. D. Subject to prior sale. 6 at dozen rate, 25 at 100 rate. Orders below \$1.00 are presumed to be sample orders, and as such are welcome.

I guarantee every bulb I sell to be healthy and true to name. We have no thrips. No grower is more glad than I am to correct any mistakes.

Write for special quantity prices. Maybe I will have a surplus in just what you want, and be able to save you money. Do not forget to figure up the number of bulbs coming to you if you ordered last fall and the price is lowered, but bulb refunds must be in the size and variety ordered. No substitutions contrary to your wishes.

	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets
Albatros (white) Each	\$.	\$.	\$.	\$.	\$. .25	\$.	\$.
Aflame (scarlet) Each	.15	.12	.....	.....	.....	.....	.....
Arabia Each	.05	.....	.....	.....	.....	.....	100 .15
(dark red) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Berty Snow Each	.15	.10	.08	.....	.....	.....	12 .15
(lavender) Doz.	1.50	1.00	.80	.....	.....	.....	100 .40
Betty Nuthall Each	.20	.15	.10	.....	.....	.....	100 .30
(salmon pink) Doz.	2.00	1.50	1.00	.....	.....	.....	1000 2.50
100	12.00	9.00	7.00	.....	.....	.....	.....
Break O'Day Each	.05	.....	.....	.....	.....	.....	100 .15
(light pink) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Capt. Boynton Each	.06	.....	.....	.....	.....	.....	100 .15
(lavender) Doz.	.60	.....	.40	.30	.20	.15	.....
100	3.00	.....	2.00	1.50	1.00	.80	.....
Carmen Sylva Each	.06	.05	.....	.....	.....	.....	100 .15
(white) Doz.	.60	.50	.40	.30	.....	.....	.....
100	.....	2.50	2.00	1.50	.....	.....	.....

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets	
Catherine Coleman	Each	.07	.06	.05	.....	.....	.....	100	.15
(dark pink)	Doz.	.70	.60	.50	.40	.....	.....	.....	.....
	100	4.50	4.00	3.00	2.00	.....	.....	.....	.....
Chas. Dickens	Each	.07	.06	.05	.....	.....	.....	100	.25
(purple)	Doz.	.70	.60	.50	.....	.....	.....	1000	1.50
	100	4.00	3.50	3.00	.....	.....	.....	.....	.....
Coryphee	Each	.30	.25	.20	.15	.....	.....	12	.25
(light pink)	Doz.	3.00	2.50	2.00	1.50	.....	.....	.....	.....
Crimson Glow	Each	.05	.....	.....	.....	.....	.....	100	.15
(red)	Doz.	.46	.34	.26	.20	.15	.....	.....	.....
Crinkles	Each	.05	.....	.....	.....	.....	.....	100	.15
(rose)	Doz.	.50	.40	.30	.20	.15	.....	1000	1.00
	100	3.00	2.50	1.50	1.00	.80	.60	.....	.....
Dr. F. E. Bennett	Each	.05	.....	.....	.....	.....	.....	100	.15
(scarlet)	Doz.	.50	.40	.30	.20	.15	.....	1000	1.00
	100	3.00	2.00	1.50	1.20	1.00	.70	.....	.....
Dr. Moody	Each	.12	.10	.08	.05	.....	.....	100	.30
(lavender)	Doz.	1.20	1.00	.80	.50	.....	.....	.....	.....
Dr. Nelson Shook	Each	.08	.06	.05	.....	.....	.....	100	.25
(rose)	Doz.	.80	.60	.50	.40	.30	.20	1000	2.00
	100	4.50	3.50	3.00	2.50	1.50	1.00	.....	.....
Duchess of York	Each	.....	.....	.05	.....	.....	.....	100	.15
(purple)	Doz.	.....	.....	.30	.20	.15	.....	.....	.....
	100	.....	.....	1.50	1.00	.70	.50	.....	.....
E. J. Shaylor	Each	.05	.....	.....	.....	.....	.....	100	.15
(rose pink)	Doz.	.46	.34	.26	.20	.15	.....	.....	.....
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Emile Aubrun	Each	.10	.08	.....	.....	.....	.....	100	.15
(rose)	Doz.	1.00	.80	.....	.....	.30	.20	.....	.....
	100	6.00	5.00	.....	.....	1.50	1.00	.....	.....
Evelyn Kirtland	Each	.....	.05	.....	.....	.....	.....	100	.15
(dark pink)	Doz.	.....	.40	.30	.20	.15	.....	.....	.....
Geraldine Farrar	Each	.08	.06	.05	.....	.....	.....	12	.15
(blue)	Doz.	.80	.60	.50	.40	.30	.....	.....	.....
	100	.....	4.00	3.00	2.00	1.50	.....	.....	.....
Gertrude Pfitzer (blue)	Each	1.00	.75	.60	.....	.35	.25	.....	.....
Giant Nymph	Each	.05	.....	.....	.....	.....	.....	100	.15
(light pink)	Doz.	.46	.34	.26	.20	.15	.....	1000	.50
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Gloriana	Each	.05	.....	.....	.....	.....	.....	100	.15
(salmon pink)	Doz.	.46	.34	.26	.20	.15	.....	1000	1.00
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Gold Eagle	Each	.05	.....	.....	.....	.....	.....	100	.15
(yellow)	Doz.	.50	.40	.30	.20	.15	.....	1000	.70
	100	3.50	2.50	1.50	1.00	.80	.60	.....	.....
Golden Dream	Each	.06	.05	.....	.....	.....	.....	100	.15
(yellow)	Doz.	.60	.50	.40	.25	.20	.15	1000	.70
	100	4.00	3.00	2.00	1.50	.80	.40	.....	.....
Golden Frills	Each	.....	.05	.....	.....	.....	.....	100	.15
(yellow)	Doz.	.....	.34	.26	.20	.15	.....	1000	.50
	100	.....	1.80	1.40	1.00	.70	.40	.....	.....
Harbinger	Each	.10	.08	.06	.05	.....	.....	100	.25
(orange)	Doz.	1.00	.80	.60	.50	.30	.20	.....	.....
Heavenly Blue	Each	.....	.....	.....	.....	.10	.08	.....	.....
(blue)	Doz.	.....	.....	.....	.....	1.00	.80	.....	.....
Henry C. Goehl	Each	.06	.05	.....	.....	.....	.....	100	.15
(white)	Doz.	.60	.50	.40	.25	.20	.15	.....	.....
	100	3.50	3.00	2.00	1.50	1.00	.50	.....	.....
Henry Ford	Each	.05	.....	.....	.....	.....	.....	100	.15
(purple)	Doz.	.46	.34	.26	.20	.15	.....	1000	.50
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Highland Laddie	Each	.05	.....	.....	.....	.....	.....	100	.15
(rose pink)	Doz.	.50	.40	.30	.20	.15	.....	.....	.....
	100	3.00	2.50	2.00	1.00	.70	.50	.....	.....

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets	
Jane Addams	Each	.15	.10	.08	.05	.....	.....	100	.40
(lavender)	Doz.	1.50	1.00	.80	.50	.40	.30	1000	3.50
	100	10.00	7.00	5.00	3.50	2.50	2.00	.....	.....
John T. Pirie	Each	.05	.....	.....	.....	.....	.....	100	.15
(dark red)	Doz.	.50	.40	.30	.25	.20	.15	1000	.60
	100	2.80	2.20	1.60	1.20	.70	.50	.....	.....
Jubilee (lavender)	Each	.75	.60	.....	.....	.....	.....	12	.50
Ken	Each	.50	.40	.....	.....	.10	.06	12	.25
(rose pink)	Doz.	5.00	4.00	.....	.....	1.00	.60	100	1.50
K's Yellow Wonder	Each	.05	.....	.....	.....	.....	.....	100	.15
(yellow)	Doz.	.46	.34	.26	.20	.15	.....	1000	.60
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
La Paloma (orange)	Each	.50	.40	.30	.....	.....	.....	12	.30
Los Angeles	Each	.05	.....	.....	.....	.....	.....	100	.15
(dark pink)	Doz.	.46	.34	.26	.20	.15	.....	1000	.50
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Mammoth White (white)	Each	.75	.65	.55	.....	.30	.20	.....	.....
Marie Kunderd	Each	.05	.....	.....	.....	.....	.....	100	.20
(white)	Doz.	.46	.34	.26	.....	.....	.....	1000	1.50
	100	2.40	1.80	1.40	.....	.....	.....	.....	.....
Marmora	Each	.15	.12	.10	.08	.06	.05	100	.35
(blue)	Doz.	1.50	1.20	1.00	.80	.60	.50	1000	2.50
	100	10.00	8.00	7.00	6.00	5.00	4.00	.....	.....
Marocco	Each	.25	.20	.15	.....	.10	.05	12	.35
(dark red)	Doz.	2.50	2.00	1.50	.....	1.00	.50	100	2.00
	100	.....	.....	.....	.....	.....	3.00	.....	.....
Marshall Foch	Each	.06	.05	.....	.....	.....	.....	100	.15
(dark pink)	Doz.	.60	.50	.35	.25	.20	.15	.....	.....
Maurice Fuld	Each	.15	.12	.10	.08	.....	.....	12	.15
(dark pink)	Doz.	1.50	1.20	1.00	.80	.....	.....	.....	.....
Minuet	Each	.10	.08	.....	.....	.....	.....	12	.15
(lavender)	Doz.	1.00	.80	.....	.....	.....	.....	100	.35
	100	7.00	5.00	.....	.....	.....	.....	.....	.....
Moorish King	Each	5.00	4.00	.....	.....	.....	.....	.....	.....
(dark red)	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mrs. F. C. Hornberger	Each	.10	.08	.06	.....	.....	.....	.....	.....
(white)	Doz.	1.00	.80	.60	.....	.....	.....	.....	.....
Mrs. F. C. Peters	Each	.05	.....	.....	.....	.....	.....	100	.15
(lavender)	Doz.	.46	.34	.26	.20	.15	.....	1000	.60
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Mrs. Frank Pendleton	Each	.05	.....	.....	.....	.....	.....	100	.15
(light pink)	Doz.	.46	.34	.26	.20	.15	.....	1000	.50
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Mrs. H. E. Bothin	Each	.05	.....	.....	.....	.....	.....	100	.15
(light pink)	Doz.	.46	.34	.26	.20	.15	.....	1000	.60
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Mrs. Leon Douglas	Each	.05	.....	.....	.....	.....	.....	100	.15
(dark pink)	Doz.	.46	.34	.26	.20	.15	.....	1000	.50
	100	2.40	1.80	1.40	1.00	.70	.50	.....	.....
Mrs. P. W. Sisson	Each	.06	.05	.....	.....	.....	.....	100	.15
(light pink)	Doz.	.60	.50	.40	.30	.....	.....	.....	.....
Mrs. Van Koynenburg	Each	.....	.10	.08	.....	.....	.....	100	.25
(blue)	Doz.	.....	1.00	.80	.....	.....	.....	.....	.....
Mr. W. H. Phipps	Each	.06	.05	.....	.....	.....	.....	100	.15
(dark pink)	Doz.	.60	.50	.40	.30	.20	.15	1000	.60
	100	4.00	3.00	2.50	2.00	1.00	.70	.....	.....
Orange Wonder	Each	.25	.20	.15	.12	.08	.06	12	.15
(orange)	Doz.	2.50	2.00	1.50	1.20	.80	.60	100	1.00
	100	20.00	15.00	10.00	8.00	5.00	4.00	.....	.....
Paul Pfitzer	Each	.12	.10	.08	.06	.....	.....	12	.15
(purple)	Doz.	1.20	1.00	.80	.60	.....	.....	100	.75
Pfitzer's Triumph	Each	.12	.10	.08	.06	.....	.....	12	.15
(scarlet)	Doz.	1.20	1.00	.80	.60	.....	.....	100	.50
	100	8.00	6.00	4.50	3.50	.....	.....	.....	.....

	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets
Pride of Portland Each	.40	.30	.25	.20	.....	.....	12 .25
(scarlet) Doz.	4.00	3.00	2.50	2.00	.....	.....	.....
Pride of Wanakah..... Each	.06	.05	.....	.....	.....	.....	100 .15
(rose) Doz.	.60	.50	.40	.30	.20	.15	.....
100	3.50	2.50	2.00	1.50	1.00	.70	.....
P's Yellow Wonder Each	.40	.30	.20	.15	.....	.....	.....
(yellow) Doz.	4.00	3.00	2.00	1.50	.....	.....	.....
Purple Glory Each	.08	.07	.....	.....	.....	.....	.....
(dark red) Doz.	.80	.70	.....	.....	.....	.....	.....
Purple Queen Each	.07	.06	.05	.....	.....	.....	100 .15
(purple) Doz.	.70	.60	.50	.30	.20	.15	1000 1.00
1000	5.00	4.00	3.00	2.00	1.50	.80	.....
Red Glory Each	.20	.15	.10	.....	.....	.....	12 .15
(red) Doz.	2.00	1.50	1.00	.....	.....	.....	.....
Richard Diener Each	.06	.05	.....	.....	.....	.....	100 .15
(dark pink) Doz.	.60	.50	.40	.30	.20	.15	.....
Rita Beck Each	.15	.12	.10	.....	.....	.....	12 .15
(light pink) Doz.	1.50	1.20	1.00	.....	.....	.....	.....
Rose Ash Each	.05	.....	.....	.....	.....	.....	100 .15
(rose) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Royal Lavender Each	.20	.17	.12	.10	.08	.06	12 .20
(lavender) Doz.	2.00	1.70	1.20	1.00	.80	.60	100 .70
Ruffled Gold Each	.20	.15	.10	.08	.05	.....	12 .15
(yellow) Doz.	2.00	1.50	1.00	.80	.50	.30	100 .60
100	15.00	12.00	7.00	5.00	3.00	2.00	.....
Salbach's Orchid Each	6.00	5.50	.....	.....	.....	.....	Each .25
(lavender)							
Scarlet Wonder Each	.05	.....	.....	.....	.....	.....	100 .15
(red) Doz.	.46	.34	.26	.....	.....	.....	.....
100	2.40	1.80	1.40	.....	.....	.....	.....
Sheila Each	.05	.....	.....	.....	.....	.....	100 .15
(salmon pink) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Souvenir Each	.05	.....	.....	.....	.....	.....	100 .15
(yellow) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Sweet Rose Each	.05	.....	.....	.....	.....	.....	100 .15
(rose pink) Doz.	.50	.40	.30	.25	.15	.....	.....
100	3.00	2.50	2.00	1.50	1.00	.60	.....
Thos. A. Edison Each	1.50	1.25	1.00	.....	.....	.....	.....
(dark red)							
Twilight Each	.05	.....	.....	.....	.....	.....	100 .15
(cream) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Tycko Zang Each	.05	.....	.....	.....	.....	.....	100 .15
(dark pink) Doz.	.46	.34	.26	.20	.15	.....	1000 .50
100	2.40	1.80	1.40	1.00	.70	.50	.....
Veilchenblau Each	.15	.12	.10	.07	.....	.....	12 .15
(blue) Doz.	1.50	1.20	1.00	.70	.....	.....	.....
Winged Victory Each	1.00	.....	.....	.....	.....	.....	12 .35
(dark pink)							

SUPERIOR MIXTURE

This mixture is quite popular. What I discard are not found here, but every bulb is a named variety, listed elsewhere in this catalog, and mixed at the time I ship them to you. Following colors are included: pink, white, yellow, red, dark red, lavender, rose, purple, blotched, smoky, as evenly proportioned as our stock will permit. Large sizes, No. 2 and over, \$2.20 per 100 prepaid. Medium sizes, No. 3 and 4, \$1.10 per 100.

SURPRISE COLLECTION

Some folks do not wish to bother with writing out a list of names with prices attached, not really knowing what the varieties look like anyway, and wish to leave it to my judgment, maybe specifying a few favorite colors. This gives me just the chance I want, because there is always a variety, maybe several, that I have an oversupply of, quite often the very best, too. Leave it to me and I will put in extra special value for your money that will surprise you. Send \$5.00, or as many times \$5.00 as you care to invest.

SEEDLING MIXTURE

Tens of thousands of seedlings, all the colors, no two alike, from selected hand-pollenized crosses: No. 1 size, \$1.00 per 25, \$3.00 per 100, prepaid.

1932 SPECIAL

Twelve large bulbs, over 1¼ inch diameter, of each of the following ten varieties for \$5.00 prepaid. Six of each for \$2.50. Pfitzer's Triumph, red; Golden Dream, yellow; Chas. Dickens, purple; Henry C. Goehl, blotched white; Marmora, blue; Sweet Rose, rose pink; Mr. W. H. Phipps, pink; Jane Addams, lavender; Catherine Coleman, pink; John T. Pirie, smoky; with one Morocco, black, for good measure.

BUY IN QUANTITY

If you will pay the express charges yourself upon delivery, and take not less than 200 of a kind and size, you may take advantage of the following quantity prices while they last. At \$20.00 per 1000 for No. 1 size, and \$15.00 per 1000 for No. 2 size: Crinkles, Dr. F. E. Bennett, Highland Laddie, John T. Pirie, Marie Kunderd, Mrs. F. C. Peters, and Sweet Rose. At \$15.00 per 1000 for No. 1 size, and \$12.00 per 1000 for No. 2 size: Arabia, Break O'Day, E. J. Shaylor, Giant Nymph, Gloriana, Henry Ford, K's Yellow Wonder, Los Angeles, Mrs. H. E. Bothin, Mrs. Frank Pendleton, Mrs. Leon Douglas, Rose Ash, Sheila, Souvenir, and Twilight. Express charges as far as Michigan, Ohio, or Colorado are about 15c to 20c per 100 bulbs, and as far as New York or Florida they are about 25c to 30c per 100 bulbs, and of course less for shorter distances. Not subject to discount.

STANDARD SIZES FOR GRADING BULBS

No. 1: 1½ inches and up in diameter. No. 2: 1¼ to 1½ inches. No. 3: 1 to 1¼ inches. No. 4: ¾ to 1 inch. No. 5: ½ to ¾ inch. No. 6: ½ inch and under.

A. G. S. SCALE FOR JUDGING GLADS

FLOWER: color, 20 points; substance, 10 points; size, 12 points; form, 5 points; condition, 5 points; total 52 points.

SPIKE: length of stem, 5 points; florescence, 15 points; arrangement of blooms, 10 points; harmony, 15 points; foliage, 3 points; total 48 points. TOTAL, 100 points.

A. G. S. MEMBERSHIP

The best place to learn what is going on in the Glad world is the GLADIOLUS REVIEW, a monthly magazine devoted exclusively to Glads. It is published by the AMERICAN GLADIOLUS SOCIETY at Goshen, Indiana. Send your dues of \$2.00 to

the secretary, Mr. Roscoe Huff. This magazine of 30 to 40 pages contains the write-up of every Glad Show of any size in the U. S. and Canada, including names of all winning varieties, and so forth; also the results of the annual votes on favorite Glads by the members; and numerous articles and reviews on every possible phase of Glad growing, Glad showing, and Glad enjoyment.

A splendid magazine devoted to flowers and philosophy is the FLOWER GROWER, published monthly by Madison Cooper, Calcium, New York.

OVER THE FENCE AND OUT

My offerings include practically all of the highest fifty in the recent Vote on Favorites, and over two-thirds of my list have appeared in the highest fifty of the last three Votes. Obviously this fact can be true only of a short list.

This past season saw the longest heave of my whole career. Seven score bucks in one bulb made it a heavy throw, but there happened to be plenty of steam behind that heave, due to the plentiful supply of heat that was generated. This investment was pure speculation. I feel like letting the other fellow have the uncertain job of trying out the new ones hereafter.

There is too much uncertainty among the new Glads. Some of them deteriorate rapidly, becoming bunt, and developing one fault or another. Let the specialist and connoisseur have this job. He enjoys it, and the profits are in proportion to the risk probably. But the general run of back-yard fans cannot afford such an expensive and uncertain luxury. Some such experience as this has discouraged many small-garden Glad lovers.

A little more conservatism, Mr. Originator.

WE'RE DUE FOR COOL SUMMERS

According to the government weather authorities and scientists our weather goes in what are called cycles. This means that a period of hot and dry weather will be followed by a corresponding period of cool and moist conditions generally. So do not be discouraged because the last two or three years have been rather extreme. Maybe this coming season will be ideal. Everything is in favor of its being that way.

HEAT AND DROUTH HAVE THEIR VALUES

The generally dry and hot summers of the past few years have done one fine favor, in spite of discomforts and grasshoppers. The weakling Glads just had no chance at all. This drouth has speeded on their way to oblivion many a likely variety that would not stand up under trying conditions. But the majority of fine things have remained tried and true through all the fiery testing, justifying our confidence in them. There is a limit to all things, but Glads are able to crowd this limit pretty high.

HEAT AND CROOKED SPIKES

It seems to be the heat and lack of moisture that causes spikes to crook. Probably the direct rays of the hot sun have more to do with crookedness than any other condition. With the thermometer as high as 108 degrees in the shade and 125 degrees, or higher, among the plants, themselves, it is no wonder that a row of Coryphee looked like the saxophone section in an orchestra. Shading the spikes from the direct sunlight and watering copiously suggests itself as a remedy.

It is probable that crookedness itself is caused by a too rapid evaporation of moisture from the plant and especially the stem. Heat alone will not cause crookedness if the humidity is high. But heat together with a dry soil and hot dry winds will do it. The remedy for crookedness would therefore seem to be plenty of moisture in the soil, shading from the direct rays of the sun by cheese cloth or lath frames, and a wind-break against the hot winds. Never plant in the shade of a tree, however, or you will not have any spikes to crook.

FERTILIZING

Barnyard manure is very good, containing, as it does, plenty of nitrogen and potassium, as well as humus for bacteria to work on. Any good commercial potato fertilizer is fine. Most chemical fertilizers must be used with great care, a slight overdose being fatal. The manures may be worked into the soil when plowed, or in the bottom of the trench beneath the bulbs. Chemicals may be scratched into the soil surface after growth is well advanced.

The Foss Heaton Glad Gardens, Creston, Iowa

Date of Order_____193__

Please write name and address plainly. If we are sold out of an item, shall we substitute nearest sizes?_____

[illegible]

(Orders may be continued on the back of this sheet)

WORN OUT BULBS

All of this forcing of the growth to make fine blooms is at the definite sacrifice of the bulb. The plant's entire strength has gone to produce the finest flower, to the comparative neglect of the bulb. Provision for the Glad's reproduction and the preservation of its species by means of bulb and bulblet increase is neglected almost entirely.

The wild Glad in its natural setting reproduces itself in two ways: by seed and by bulblet offsets. Placing emphasis on the one will sacrifice the other. This is why some commercial growers, who grow for the bulbs exclusively, often disbud all their Glads. The bulb growth is found to be better, with a better bulblet increase. Likewise, those who grow the blooms for the cut flower market point their growth in that direction by fertilizing heavily and installing irrigating systems. These folks should discard their crop of bulbs at digging time if they want the finest bloom for the following season. They might not notice it particularly, but there will be a real deterioration in their second crop of blooms. It is true, very definitely true, that a grower cannot point his Glads both ways. Emphasis on the one purpose is always at the expense of the other.

Even where the harvested bulb is up to size, there is a definite loss in quality, when it has been forced. We have all noticed in our gardens that a Glad often turns brown and dies soon after blooming. The bulb when dug is flat, and the brown husk falls off. This kind of bulb is inferior. A bulb should be high-crowned with a firm tough covering.

BALANCED RATIONS

Plants take food from the soil. They assimilate this food for growth. Animals take their food from various sources, and they also assimilate their food for growth. We all know that animals like a variety of food. All corn and no grass, no minerals, no bugs and worms to be rooted up by a hog, will make a mighty poor porker. We are animals ourselves, and like salt and pepper, spices and flavors, and we want a different vegetable, or a different meat, for today from what we had yesterday. We must have variety, or we too will be mighty poor specimens. We seem to require the alphabet of vitamins, at least the first half of the alphabet, and maybe the last half for all we know now at least. This desire for variety is not an unnatural whim, but exists because there is a real need for it. The physical system for assimilating food demands it for the best growth. This is the reason why a Glad grown in pure sand is not getting all it should get. The fertilizers used are of necessity limited to a very few food elements. A clay loam is black because it has been accumulating and retaining for ages from many sources a great variety of food elements. Black soil is a balanced ration.

My growing stock of Glads is raised in a heavy black clay loam without fertilizers of any kind and without irrigation. They are peppy, high-crowned, solid bulbs that are making good.

FORCED GROWTH

One of the finest characteristics of Glads is their ability to respond to heavy feeding pressure for forced growth. A visit to any of the recent big Glad shows will reveal the wonderful results of this ability. The giant spikes and gorgeous blooms are a revelation. It really seems possible that the amateur Glad fan, who can give his plants the proper care and feed, will force out of the running the professional with his field grown stock. At the last season's shows he took the lion's share of the ribbons, at least.

Most varieties will heartily respond to plenty of fertilizers if used with proper caution. All things can be overdone. Experiment and trial will best determine your particular case, because soils and climate and conditions differ. A general caution would be to keep fertilizers from contact with the bulbs, and to use oceans of water on a well drained soil. Be very careful in the use of chemical fertilizers. They must be applied sparingly, or you may do more harm than good.

OVERDOSES

I have observed that too much of any fertilizing element in pure form is often disastrous. This means such chemicals as ammonium sulphate, acid phosphate, lime, and so forth. An overdose, even when raked into the soil surface, is fatal, I have found by sad experience. About the safest are animal manures, but you will notice

every authority will caution that they be well rotted, or else plowed under the fall before. It seems that these fertilizing elements must be thoroughly incorporated into the soil before they are available to the plant. The best soil enricher is decayed vegetation that is combined with the soil by the action of bacteria, making what is called humus. The reason that rock phosphate is safer than acid phosphate is the fact that it is rather slow in breaking up into a form available as plant food after it is in the ground. Light applications of nitrogen, phosphorus, and potash in their various quickly-available forms are very beneficial. Overdoses of these same applications are harmful and often fatal.

STRAINS AND CLIMATE

I have found many varieties, originated in a cool and moist climate, that proved to be complete failures here in Iowa, even after repeated trials. They simply would not settle down and be satisfied in their new environment. Generally speaking, a variety that is originated in the Central States has the best chance of satisfying most of us, because this is a climate under which most of us live. It is where the summers get hot and dry nearly every year, and where the soil is pretty much the same. Then again, I have found many fine Glads that migrated from other regions to our Middle West and made good with a bang and a flourish, thus proving themselves adaptable.

Several fine varieties, which I have grown for years, have quite noticeably developed in their habits and manner of growth and increase, as well as bloom. These might be called strains. They have adapted themselves to the Iowa climate, and are proving themselves very suitable for similar climatic conditions. It is also probably true that a Glad that can stand the heat and drouth will appreciate cool and moist conditions, and show its appreciation by finer bloom. If a Glad does not adapt itself to this Iowa climate, after a fair trial, it is a candidate for membership in the "over-the-fence" brigade. Perhaps that is why certain varieties are not listed in my catalog.

MORE ABOUT SIZES

What sizes to buy? This depends on what you wish to use them for. The usual price range for the six different sizes just about represent their relative values.

For bulblet increase use the smaller sizes, No. 4, No. 5, and No. 6. The other three sizes are poor producers of bulblets in most varieties. All No. 4 bulbs will bloom. In many varieties it is the best of all sizes for the reason that this size very rarely sends up more than one spike, in which all the strength of the plant is concentrated. If a No. 3 will send up just one spike, and they do for most varieties, of course it is the best for bloom production. The two smaller sizes are not always certain of blooming in most climates and seasons, though with good care they will all bloom, even sometimes a few of the bulblets. Of course, the flower spike is not so good, though the individual floret is nearly always fine.

For bloom production the three larger sizes are best for the most part. In many varieties about the only difference among these three sizes is the relative number of spikes per bulb, the larger the bulb the greater the number of spikes per bulb, with little difference in quality of the individual spike. The exception to this rule in quite a few varieties, and in most of the newer and finer kinds, is the fact that the No. 3 size that will put all its strength in just one spike will surpass any of the spikes from the larger bulbs.

Generally speaking, if you want good blooms, the medium sizes are a good buy. Those who want to force them in greenhouses should use No. 1 size only. Those who want the increase should use No. 5 or No. 4 sizes, as these are fairly certain of blooming enough to identify the variety. Those who want plenty of spikes of high quality should use No. 1 or No. 2 sizes.

OLD BULBS AND YOUNG BULBS

For most varieties the crop of bulbs from a planting of bulblets are No. 6 and No. 5 sizes, with some No. 4's. In some cases with exceptional care and very favorable growing conditions there will be quite a few larger sizes. There will also be quite a few bulblets, and these bulblets are more certain of sprouting than those from older bulbs, and are more full of "pep."

These small bulbs are called planting stock. The second season's growth from a

planting of these sizes results in a crop of bulbs of the larger sizes, the proportion of No. 1's depending on growing conditions as well as on the variety. This crop of bulbs represents the Glad bulb at its best period of life, even though the bulb renews itself from year to year. Heretofore it has occupied itself in producing bulb; hereafter, in producing bloom. Bloom production is always at some expense to the new bulb.

These young bulbs may be identified by the high crown, which means a relatively long vertical diameter, and also by the fact that they are firm and solid, with a husk that clings snugly to the bulb. A brown papery husk that readily falls off, a flat appearance, with a big scar on the under side are indications of old age in a bulb.

MAKING BULBLETS GROW

If they are very stubborn about sprouting, as a few varieties are, leave them in your basement for a year or two, and then they will grow. Like sleepy children in the morning, by the end of that time they will be getting curious to know what is going on out in the world, and will wake up to find out. However, this is wasted time. A soaking in water for several days is a big help in sprouting. But the best method is to break the hard shell, using the point of a penknife. Of course, this is very slow and tedious, and economical only in the higher priced varieties. Do not remove the husk and do not bruise or cut the kernel. I have also mixed them in equal parts of wet sawdust, keeping them in a warm room for two or three weeks, or until they showed small sprouts. Be sure they are kept moist and warm.

It is Nature's plan for a part of the bulblets to remain dormant in the ground, so that they will be there in case of an emergency when all growth above ground is destroyed, or fails to start on account of drouth or other calamity. The same thing is true of other plants. For example, seeds of the weed called "pie-marker" have been known to wait for thirty years in the ground before sprouting, when they had a chance to do so in any one of these thirty years.

A sudden change of climate or growing conditions will often cause bulblets to resist sprouting. In several cases where I have been trying out a new variety, I have planted a fine crop of the bulblet increase, only to find that not more than two or three out of a hundred would sprout. On the other hand, when a variety has become thoroughly acclimated the bulblets nearly all will sprout, and make a peppy growth. The hard shell is a device to protect the heart and life of the bulblet during the long rainless period in which the Glad lies dormant in the ground in its native South African home. At the approach of the rainy season it will start its growth again as soon as moisture reaches its kernel.

THE PRINCIPLE OF RUSTLING

The bulb grower may take a lesson from the hog raiser. It is the laziest hog that makes the fattest hog. For economical production of pork the porker must be in position to be as economical as possible with its time and efforts. But when the farmer wants to raise a new crop of pigs, he lets up on the feed of their mothers. He turns the sows on grass and makes them rustle for a living.

Nature does not care for the individual. Her whole concern is in the preservation of the species. It is Nature's plan to store up strength in the bulb in order to carry it safely over the dormant period. Where conditions are somewhat difficult for growing bulb, Nature redoubles her efforts in that direction. When a plant has to work for what it gets, it naturally bends its greatest efforts towards reproducing its kind. This means in the case of the Glad more bulblets and more peppy bulb growth, if conditions are somewhat adverse with regard to plant food and moisture. If you would have the best bulbs and lots of bulblets, do not feed your plants too much. Of course, you must not overdo this thing. Do not starve your plants, but give them a moderate amount of moisture and a well-balanced diet. Natural rainfall and natural black soil seem to be all right for a vigorous bulb and a generous increase.

BACK TO THE GARDEN

Those who are in position to know, such as seedsmen, nurserymen, editors, and others, say there is now a definite swing back to gardening. The greater interest in the home garden as a source of food supply is no doubt in part due to the business depression. But a change was about due anyway. Living out of tin cans had gone to an extreme. With this new interest in gardening, of course, goes a renewed interest

in home grown flowers, and an increasing demand for plants, seeds, and bulbs. Lucky is the local grower who is in position to supply them. Now is a very propitious time to hold up the following ideal, and to push it with vim, namely, "No home without a garden, no garden without flowers."

HOW MANY OUT

Where the climate is cool and moist, Glad spikes will open twice as many at one time, maybe more, than the same varieties will where the climate is hot and dry, as it is in Iowa in August. I was surprised exceedingly when I beheld a Scarlet Wonder with seven or eight open blooms at a Connecticut show a few years ago. This variety opens no more than two here in Iowa, sometimes three. Some folks think it is a Scotch variety out here in the West. Sometimes I make a July planting of large bulbs for late September bloom, and get flower heads of some of the stingy varieties that more nearly approach their catalog descriptions. When you read a variety description, always look up the geography of the describer.

CARE OF CUT SPIKES

In cutting leave four or five leaves on the plant to develop the new bulb. Except for special purposes, do not cut the spike longer than twelve to fifteen inches below the flower head, because on long stems the flowers do not bloom out at all well, wilt easily, and quickly become inferior. The flower heads lack the pulling strength to draw moisture through the longer stems. See that the water is clear, because any impurities in the water will clog the pores in the end of the spike, and the flower will deteriorate. Greenery of any kind, such as is used in basket work, soon pollutes the water, and should be removed and freshened at least once a day. Change the water daily, remove the wilted blooms, and cut off a thin slice slantwise from the lower end of the spike. Place the flowers where air currents will not strike them. You may retard the blooming out of a cut spike by placing it in a cool place, such as a cool dark cellar, or a refrigerator that will not freeze it.

WHEN TO PLANT

This depends on when you want them to bloom. Varieties vary greatly in the length of time from planting to blooming, and you must take this into account. For July flowers I plant early kinds as soon as the frost is out of the ground to stay, and for late September bloom I plant large bulbs in July. In general, early planting avoids the drouth and heat of late August, and late planting carries the bloom period beyond the hot and dry time of late summer. Of course, early plantings require a longer time to come to bloom, because the later warmer weather rushes the growth along.

You may have a long season of bloom if you will plant both large and small sizes of bulbs all at the same time. It requires a much longer time for a small bulb to come to bloom than it does a No. 1 size. In general, the bloom period varies inversely as the size of the bulb, and this includes the larger bulblets of many varieties. For example, I can bloom a Bennett in July if I plant a No. 1 bulb in April, while the frost will kill my bulblet spikes of Bennett in early October. And I will have Bennetts all the time in between these two dates, simply by planting all possible sizes from No. 1 to bulblets all at the same time. Simultaneous plantings like this are much less troublesome than planting at intervals.

Save your bulblets when you dig your bulbs. Plant them with your Glads next spring. Sprinkling the little hard-shelled fellows in the same trench along with your large bulbs will give you quite a few mixed sizes when you dig the new crop. Not all will grow, of course, but there will be quite a few fine, round, peppy, up-and-coming bulbs. Put your main dependence on these, and throw away the old flat, brown, thin-husked fellows. An African tribe of savages is known to kill and eat the older members of their tribe as soon as they show signs of senility. Rather drastic for humans, but not for bulbs.

TRANSPLANTING

Some folks would like to get an early start by planting their Glads indoors, and then transplanting. I have found that Glads do not transplant at all well. They seem

to be set back too much, unless the bulbs are planted individually in pots or small paper bags, and thus planted outdoors without disturbing the roots. Even this method does not give the Glads a fair chance. Outdoors in the warm sun is what a Glad needs to give it the proper boost.

HOW COLD

Glad stems will stand four to six degrees of frost without injury. Spring frosts usually do not harm early planted Glads. It is the bulb that is easily damaged by freezing. But a frozen stem does no injury to the bulb if the bulb itself is not frozen. Therefore, you need not hesitate about early plantings of Glads, if you feel reasonably sure that the ground will not freeze down to the bulb.

WHERE TO PLANT

Glads have one fault which has caused some people to cuss them. They refuse to be overshadowed by anything. They dislike the vicinity of trees especially. Glads would make a fine prairie flower, because they delight in plenty of elbow room, and demand the free sunlight and open air. People have learned by experience not to plant cabbage, sweetcorn, cucumbers, beets, and so forth, anywhere except in the open garden, which is always at a sensible distance from trees. Plant your Glads there, and they will surely appreciate it, and show their appreciation by giving you fine bloom.

The soil must be well drained and have plant food. With these exceptions, any soil, any climate, any place will bring a Glad to bloom. It seems to be a universal flower. They seem to thrive in every State of the Union, and as far off as New Zealand.

THE LANDSCAPING IDEA

Landscaping with Glads is all nonsense. The wilted blooms, the finished spikes, the leaning stems, the straggly effect of spikes not all blooming at once, the necessity of constant cultivation, all mitigate against the uniformity which is the very essence of landscaping with flowers. Glads are a cut flower. Plant them in your vegetable garden, and bring the blooms indoors.

INDOOR BLOOMING

Probably the greatest reason for the popularity of Glads is their splendid keeping and lasting qualities. I cut a bouquet of a new cream seedling during the heat of last summer. Three weeks later to the day the last of the tip buds opened a fine flower that was held erect on the stem, with little loss in size and no loss in color. This is exceptional, of course, but a Glad spike will supply fresh blooms each morning for days right there on your table. Cut your Glads. Bring them in, and let their bright faces light up your parlor, office, church, sick-room, work-room, or wherever you spend the biggest share of your time.

HOW TO PLANT

The deeper the bulbs are planted the less the chance of their falling over at blooming time. Otherwise, there is no difference in the results between deep and shallow planting. Planting operations are less expensive for shallow planting, of course, and commercial growers seldom plant more than three or four inches deep. The character of the soil should be taken into account. A light sandy soil dries out more quickly than a heavy clay loam, for example. Bulbs should be planted deep enough to be sure of getting all the moisture available during any part of the growing season.

Plant single file in a straight row, and about two inches apart in the row. The size of plant does not warrant a greater distance apart, there being plenty of plant food for this amount of growth. The reason for planting single file is to permit cultivation close up to the plant on both sides of the row, thus reducing hand weeding to a minimum.

The distance between the rows depends on your means of cultivating, but for proper growth it need not be over eight inches. Gladitis symptoms begin to appear as the plant increases in growth, becoming acute when the buds show color. One of the most pronounced of these symptoms manifests itself by much trampling of the

ground between the rows, in which case it would have been better had the rows been placed farther apart.

Deep planting will not be necessary if you will stake your Glads at blooming time. Japanese bamboo canes can be obtained at any greenhouse, and the three-foot canes cost about one cent each.

ECONOMY IN WEED CONTROL

Weeds come up more quickly than do the Glads. I use this opportunity to destroy the first crop of weeds in the row. There is a tool on the market called a garden mulcher. It resembles a lawnmower, having revolving discs, and a horizontal blade that passes just beneath the surface of the soil. I run this mulcher over the top of the row just before the Glad shoots appear. This completely destroys the weeds in the row of Glads. Then after the Glads are up, and another crop of weeds appear, I pass this mulcher on each side of the row and as close to the plants as possible. This gets a large share of the second crop of weeds, especially if the single-file row is straight. The weeds that are left in the row itself are raked out, or at least flattened out, by another handy tool resembling a Japanese rake. It has wire teeth about twelve inches long and curved near the ends, and flexible, so that no damage is done to the plants themselves, but the tiny weeds are either torn up or flattened out. Cultivator shovels are so adjusted that these prone weeds may be entirely covered up and destroyed. By these various devices hand weeding is reduced to a minimum.

CULTIVATING

The big objective in cultivating is weed eradication, of course. During the early part of the season in particular, and to some extent all through the summer, there will be weeds coming up, especially after a hard rain. Remember that little weeds make big weeds and that the easiest time to kill them is when they are little. Breaking the crust and pulverizing the soil surface not only destroys the young weeds, but it also keeps the soil loose, especially the kinds of soils that "bake" easily, so that plenty of air may reach the root system. It also helps preserve the moisture, which has proved very essential in these hot dry summers of recent years. Keep the soil loose and keep the weeds away, and you will thus preserve all the available plant food and moisture. A surface cultivator, such as a hoe, is the best for this purpose, provided it is sharp. Deep shovel cultivation is not necessary at all, and is really harmful after the plant has attained any size, because it destroys the fine network of roots that extends to quite a distance from the plant.

DIGGING

Dig your bulbs before the stems die. Dig them just as soon as you notice the leaves and stems beginning to turn brown, even if you have to do it sooner than you would like. It is harmful to the bulb if it is left in the ground after the leaves are no longer green and growing, especially if the ground is damp. To be sure, in their wild state they stay in the ground after growth has ceased, but growth there has stopped because the long dry period of the year has already commenced. It is the dampness that injures the bulb.

Remove the stems as soon as they are lifted, using a sharp pruning shears. You might damage the husk and spoil its good looks if you tried to break its neck with your hands. If your soil contains clay, washing the bulbs will improve their looks. I use a barrel churn and much water.

CURING AND STORING

Do not spread your bulbs out in the sun to cure. A bulb that is cured too rapidly becomes soft in the process, almost as if it had been frozen. Of course, it will harden again as the curing is completed, but it surely is somewhat of a shock to the bulb. Bulbs will cure nicely, if the soil is removed as much as possible, and they are placed in shallow trays in a dry airy place. Small quantities will even cure perfectly in paper bags.

In handling the bulbs before they are cured, be careful not to bruise them. It will

not be noticed at the time, but there will be chalky areas on the surface of the bulb beneath the husk. They are very easily bruised when they are green, and often destroyed.

Bulbs will keep perfectly in a cool, dry, airy place, where they will not freeze. If too warm, they will start sprouting before you want them to in the spring. If too damp, they might mold. A furnace room, not too close to the furnace itself, seems to be fine. Do not store in a cave or damp cellar.

The dried-up old bulb is removed most easily about a month after digging. After that it becomes attached very tightly to the new bulb, and is removed with difficulty and danger of injury to the bulb. Remove the roots and trash, and separate the bulblets. Place the bulblets in tight paper bags to keep them from becoming too dry, because dry bulblets are slow to sprout.

KNOBS

Sometimes a bulb fails to show growth above ground. Examination reveals a small knobby new bulb to be formed on the top of the old bulb, usually about an inch in diameter. The same thing occurs when bulbs are left in the store room all summer. The bulbs grow a shoot about six inches long, and then growth apparently ceases. But if you will remove the husks in the fall, you will find these same knobby bulbs. Bulbs shipped from a distance in the winter will sometimes do this, on account of being chilled. A sudden drop in temperature, such as would happen if sprouted bulbs were left out in the open on some frosty night in the early spring, would have the same result.

The explanation of this phenomenon is simple. A change in temperature conditions will cause the plant to pass into dormancy as quickly as possible. One of the greatest discoveries of modern times in horticulture is the fact that the character of a plant's growth may be influenced simply by controlling the ratio of daytime and night time. Keeping the daylight the same in length by using artificial light for a part of it, a plant has been known to be kept from going to seed for many months after its natural time. The reverse of this is seen in the fact that weeds that come up in the fall will go to seed at once, no matter how small they are. The old saying that Jack Frost never fooled a cockle-bur is only another way of stating a great natural law. The process of passing into dormancy is making provision for its preservation through seed or otherwise, and in particular the bulb and bulblets in the case of the Glad. These knobby bulbs behave just like any other bulbs when they are planted the following spring.

DISEASES

Glad's have several different diseases, each caused by a distinct germ, or spore, that will not affect any other plant. The presence of disease is indicated by black or brown spots, or patches, on the surface of the bulb, which during storage may reduce the entire bulb to a mummy.

Chemicals will not penetrate to the heart of these diseased areas. The only cure that is at all certain is to remove these patches with a knife from both the surface and the heart of the bulb, if it has penetrated that far, and to treat the remainder of the bulb with some chemical like corrosive sublimate. All your efforts will be useless if you overlook any diseased tissue in the bulb. I use a large hand glass to be sure of discovering every vestige of diseased area. These disease germs will remain alive for a year or two in the soil where diseased bulbs have been grown. So you should plant your treated bulbs in fresh soil.

My formula for the use of corrosive sublimate is a solution of one ounce of the powder to about five gallons of water. Dissolve the powder in a little hot water first. Do not use a solution for more than one batch of bulbs. Twenty-four to thirty-six hours soaking will suffice. Use wood or earthenware containers, placing the bulbs in cloth bags and packing them in the containers snugly, so as to economize on this rather expensive chemical. It loses its strength in solution in a day or two, and it will quickly eat into metals.

Do not mistake for disease the chalky areas which are caused by bruises, nor the scars from cuts, nor grub bites where the husk and part of the bulb have been eaten away, nor wire-worm holes, and so forth. Glad diseases are a rot which destroys the bulb slowly during storage, as well as in the ground.

Some growers claim that some varieties are more disease-resistant than others,

and that diseases are more virulent in certain soils and in different seasons. There is probably considerable truth in these claims. Most folks plant year after year in the same plot of ground, and if they are careful to destroy all diseased bulbs at digging time, and to plant only clean bulbs, they will not need to worry about diseases. However, if disease begins to get the upper hand, the above remedies must be resorted to.

DO GLADS RUN OUT?

A Glad bulb renews itself from year to year indefinitely, and the spikes of bloom are pretty much alike. Where a mixture has been planted for a number of years from an original purchase of several different colors, and now appear to be all of one or two colors, this is not due to "running out," but to the fact that some varieties are stronger than others, and that the stronger survive. Some folks say that certain varieties are not so good as they used to be. Perhaps the finer newer kinds cause them to appear inferior by comparison.

BOTANY OF GLADS

The Glad belongs to the Iris family, which contains more than thirty genera, including the Iris, Crocus, Ixia, Freesia, and Watsonia. In the genus *Gladiolus* there are about one hundred and fifty species, with an extremely wide range of variation in the bulbs, in the size and form of plant, in habits of growth, and in colors.

THE FIRST HYBRIDS

There are fifteen species of *Gladiolus* in Southern Europe, Asia Minor, and Persia, but only a few of these have been cultivated. The French and Italian cornflags, of a purple color, were commonly found in the grain fields of these two countries, sometimes in their meadows. And they were also grown in English gardens as early as the sixteenth century. But no effort was made to improve them. They were not held in any great esteem, and were used only because they bloomed at a season when other flowers were scarce.

It was when the South African species from the Cape of Good Hope were brought to Europe that the first impetus was given to *Gladiolus* improvement. The species "blandus," a white tinged red, and "cardinalis," a bright scarlet, and "floribundus," a pinkish white, were among the first ones introduced, and they were brought to Europe during the latter decade of the Eighteenth century. Glads being easy to cross-fertilize, soon a number of new forms began to appear. But the first important hybrid was *Gladiolus* "Colvillei," raised in 1823 at Colville's Nurseries, Chelsea, England. It was a seedling of the species "tristis," a yellowish white flushed purple, fertilized by pollen from "cardinalis." The flower was a bright scarlet with a white blotch. During the next twenty years a number of hybrids were obtained, but the real starting point of the modern *Gladiolus* came with the introduction in 1841 by Louis van Houtte of the *Gladiolus* "gandevensis," with several varieties, the most famous being *Brenchleyensis*, a bright red with a yellow blotch. This strain created quite an interest in the *Gladiolus*, and from this time on the plant steadily grew in popular favor. Following van Houtte there were many breeders in England, France, and Germany, the most famous being Kelway, Lemoine, and Leichtlin. Leichtlin's seedlings, later called the Childsii strain, were brought to America, and became the foundation stock of most of the fine varieties introduced by American originators.

The species "primulinus," recently discovered near Victoria Falls, has not only added much in the way of pure yellow colors and blendings of yellow, but also lent much improvement in form and grace, and especially in the length and stretch of the spike.

GLAD BREEDING

It goes without saying that to win success in any line of breeding one must have definite ends in view and definite ideas in mind. This fact is no less true in Glad breeding. Each variety is just one step in the process of breeding, and successful breeding depends on the proper selections of the individuals to be mated. If one is to make progress towards his ideal he must know the possibilities and characteristics of each variety he uses.

This matter of Glad hybridizing is not such a haphazard thing as some folks would have us believe. Of course, a great deal depends on being able to recognize a superior variety, when one does get it, from among thousands of attractive things. But the secret goes back farther than that. The originator of many world-famous Glads knew enough about their ancestry to have a pretty good idea about what might come. The element of luck enters into the matter, but it is far from being the determining factor.

One must know about what each variety will do. For example, I have found that Jane Addams impresses its characteristics very strikingly on its offspring. That white throat blotch is about as dominant a trait as the white face in the Hereford breed of cattle. Its great keeping and lasting qualities are very noticeable in its seedlings. The fine tips in a basket of seedlings that have been cut for some time are almost sure to be from Jane Addams seedlings. The size carries over very well, too. I have discovered a few others that are good breeders. I have also found many that do not breed on. These are neutral when it comes to breeding value, failing to make any definite and useful impression on their offspring. As in all lines of breeding among plants and animals, the strikingly outstanding individuals are likely to prove the best producers. This means, for example, that if you want to produce a superior yellow you have good chances for success if you will try out the best yellows you know of. Other colors are not so likely to give you what you want in yellow. Principles of breeding call for the largest and truest yellows you can find, to use as stepping stones to further progress.

Some very fine Glads have been originated by amateurs. A few of these back-yard Glad fiends have in fact been so successful that they are finding themselves in the Glad business. Originating fine Glads is not the monopoly of a few specialists. There are no mysterious secrets nor complicated scientific formulae. Just cross your two fine Glads that appeal to you as likely parents, and take good care of the seedlings, and above all observe and analyze results. There is a big prize for a fine Glad waiting for you, for the Glad world is anxiously watching for the appearance of a true blue, for instance, or an honest-to-goodness orange, or a bigger yellow.

GLAD SEED

I do not have much luck trying to get seed to set in the hottest part of the summer, but I have good results during the last week of August and the first week of September. Allow three or four weeks for the seed pods to mature before frost. The pollen should be as fresh as possible. I detach the florets from the spikes in the field just as soon as the pollen shows, and apply to the flower of the seed parent by brushing the stamens directly against the pistils. Glads are too much of a hybrid to expect perfect results, even if the pollen be applied very liberally and repeated the following day. I do not think it necessary to cover the flower or to remove its stamens, as wind-blown chance pollen and bees do not interfere to any great extent. Keep a record so that you may learn the breeding qualities of the different varieties. Learning what crosses are promising, as well as what ones are poor, saves time and effort.

Plant the seed shallow early in the spring outdoors in rich soil, keep the ground moist at all times, and shade from too much direct sunlight by using lath frames. The hot sun burns the little plants off. Rich soil assures nice plump bulbs of good size, that will be more likely of blooming the following year.

WHAT ARE THE BEST GLADS

A clear beautiful color and a fine flower-head to support and present this beautiful color, this is the sum and substance of what we mean by a good Glad. For any particular color class among the twenty-one A. G. S. classes, the varieties that come anywhere near meeting the above requirements may be named on the fingers of one hand. Unless you are a connoisseur or a specialist or a bug with the hobby of collecting, why bother with an infinity of varieties. If you merely love Glads for their beauty enough to provide a place for them in your garden, then you are interested in knowing which ones are best. You want to know, for example, which variety is the best orange, or the best purple, or the best light pink, and so forth, and which ones are about as good. This is the object of the A. G. S. Vote on Favorites, which is held each year. This vote determines which varieties are most likely to satisfy under average conditions the world over. For the past season the Vote was by color classes for the first time, and the results will be announced in the A. G. S. Review.

MY IDEAL GLAD

I have been raising Glads from seed for fifteen years, resulting in tens of thousands of seedlings of all colors and kinds, and have never named one. During these years I have gradually evolved my idea of what the ideal Glad should be. The following twenty-one points just about cover the ground: (1) Will not wilt nor burn in the hot sun; (2) Stands up fine under dry conditions; (3) Prolific and easy growing, blooming from the smallest bulbs; (4) Healthy, heavy foliage; (5) Stem does not crook; (6) Bulb usually sends up only one spike; (7) Responds to heavy feeding pressure; (8) Fine form and well opened; (9) Well spaced and placed on the spike; (10) Large size

and harmonious proportions; (11) Five to eight out, and as many more showing color; (12) Tall stretchy spike out of well bunched foliage; (13) Twenty or more buds; (14) Vivid, clear colors; (15) Fine under artificial light; (16) Blooms out when cut clear to tip with no loss in color; (17) Does not streak nor fleck; (18) The wilted blooms do not detract; (19) Plenty of substance; (20) Stiff, sturdy, wiry stem; (21) Possesses that indefinable something called charm.

THE SEASON'S BEST 25

Another hot summer that tested Glads with a vengeance. No weaklings in the following best for this year: Betty Nuthall, Catherine Coleman, Crinkles, Dr. F. E. Bennett, Dr. Nelson Shook, Emile Aubrun, Geraldine Farrar, Golden Dream, Jane Addams, John T. Pirie, Mammoth White, Marmora, Minuet, Mrs. Leon Douglas, Mrs. F. C. Peters, Mrs. P. W. Sisson, Mr. W. H. Phipps, Orange Wonder, Paul Pfitzer, Pfitzer's Triumph, Red Glory, Ruffled Gold, Salbach's Orchid, Sweet Rose, and Veilchenblau.

What Others Say—

Sept. 13, 1931.

"Last spring I gave you an order for 12 different varieties of Glads in sizes 4 and 5, and I really was wondering if so small a bulb could bloom. My order was 12 of each and you gave me 14 of each, and every one has bloomed, and Oh what flowers—so am very much pleased with your Glads. Am sending you a picture of one of my baskets—so you can see the size of bloom and spikes.

Yours,

H. R. W., Pa.

Sept. 11, 1931.

"Enclosed herewith is a kodak picture I snapped the other day of a magnificent bouquet of W. H. Phipps Glads raised from bulbs supplied by you. My Phipps are the marvel of all the Glad growers of . . . They seem to have a deeper pink than any others of the variety grown by others in the city, and they certainly are more prolific. I have cut two spikes with 14 florets open and 24 buds total. There have been a dozen or more which after cutting developed 16 to 18 florets before the first was wilted enough to remove.

Incidentally at our flower show this year I took first on red Glads, Bennetts; first on collection of Glads, at least 25 varieties, nearly all yours; first on basket of one variety, Bennetts; altogether eight first, seven second and two third ribbons. The Bennetts were your bulbs.

I am delighted with Marmora. . . . I only got three bulbs of Marmora from you but each developed perfect spikes. Must have more of these next spring, so be sure and save some for me. Also more Golden Dream. . . .

Let me again commend you on the fine variety of bulbs you are supplying your customers. . . .

E. H. T., N. Dak.

May 31, 1931

"Glads are up and coming. Thanks for good measure. Mighty "peppy" bulbs.

J. B. H., Calif.

April 7, 1931.

Received the bulbs you sent me the other day. I would like you to know that they are the strongest and healthiest and cleanest looking bulbs that I have received from any dealers. . . .

MRS. W. L. W., New York.

Dec. 30, 1931.

Received the bulbs O. K. and say believe me they were fine. I call those kind tailor made, each bulb was perfect.

How in the world do you grow them so high crowned and healthy looking.

Wish I had known the quality of your stock as I ordered 500 Phipps from . . . and Minuet and Golden Dream from . . . I have always received pretty fair bulbs from both growers, but yours were far better.

E. S., Ohio.

Jan. 16, 1932.

I had wonderful success with your Glads bulblets last year.

MRS. F. E. B., N. J.

NOTICE

Do you wish to continue receiving the GLAD GUIDE? I am planning a more complete and comprehensive story of Glads for my 1933 GLAD GUIDE. It will contain Glad information in greater detail. Heretofore what I have included in my various catalogs has been somewhat sketchy. This new GLAD GUIDE will also contain, according to present plans, photos of my two new seedlings to be introduced at that time. These seedlings will be the first I have ever named, and they have so far measured up in practically every detail to the twenty-one points of my ideal Glad.

I want your name and address, if you wish to have a copy, whether you have been buying bulbs of me or not in the past. All who love Glads are gladly welcome to a free copy. Just fill out and send me the blank below, without any obligation on your part. Quite a few addresses are changed, and also a few folks lose interest in Glads perhaps. This plan of your making reservations will clear these up. No reservations necessary for those who order bulbs of me during the season of 1931-1932.

My reservation for the 1933 GLAD GUIDE

Please send a free copy to:

My name -----

Street or Route -----

City or Town -----

State -----

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Creston, Iowa

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